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Elias et al. (43) **Pub. Date: Feb. 16, 2006**(54) **METHOD OF INCREASING THE SPATIAL  
RESOLUTION OF TOUCH SENSITIVE  
DEVICES****Related U.S. Application Data**(60) Provisional application No. 60/522,107, filed on Aug.  
16, 2004.(75) Inventors: **John Greer Elias**, Townsend, DE (US);  
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Orr IV**, Cupertino, CA (US)**Publication Classification**(51) **Int. Cl.**  
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(52) **U.S. Cl.** ..... **178/18.06**(57) **ABSTRACT**

Disclosed herein is a capacitive touch sensitive device. One aspect of the touch sensitive device described herein is a reduction in the number of sensor circuits needed for circular or linear capacitive touch sensitive devices while maintaining the same resolution and absolute position determination for a single object. A related aspect of the touch sensitive device described herein a coding pattern that allows each sensor circuit of a capacitive touch sensitive device to share multiple electrodes at specially chosen locations in a sensor array such that the ability to determine the absolute position of a single object over the array is not compromised.

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